

[DOCUMENT NAME] CLAIMS

[CLAIM 1]

A work carrying device of pressing machine, comprising:

frames provided on both sides of a moving bolster in a work transfer direction;

5 a pair of bars provided in parallel in the work transfer direction;

a feed carrier held by each of the bars;

a feed drive mechanism provided on each of the bars, the feed drive mechanism driving the feed carrier in the work transfer direction;

10 a lift drive mechanism provided in each of the frames, the lift drive mechanism driving the pair of bars in a lift direction so that the bars moves vertically;

a clamp drive mechanism provided in each of the frames, the clamp drive mechanism driving the pair of bars in a clamp direction perpendicular to the work transfer direction; and

a work holder detachably attached to the feed carrier for holding a work.

15 [CLAIM 2]

The work carrying device of pressing machine according to claim 1, wherein the feed drive mechanism is provided with a linear motor.

[CLAIM 3]

20 The work carrying device of pressing machine according to claim 1, wherein the feed drive mechanism is provided with a servomotor.

[CLAIM 4]

The work carrying device of pressing machine according to any one of claims 1 to 3,

25 wherein a plurality of the work holders for plural working processes are detachably attached to the feed carrier.

[CLAIM 5]

The work carrying device of pressing machine according to any one of claims 1 to 4,

wherein the pair of bars include fixed bars supported by the lift drive mechanism

or the clamp drive mechanism, and movable bars capable of being detached from the fixed bars.

[CLAIM 6]

A work carrying device of pressing machine, comprising:

5 a pair of bars supported by frames provided on both sides of a moving bolster in a work transfer direction, the pair of bars being arranged in parallel in the work transfer direction;

a feed carrier held by each of the bars;

10 a feed drive mechanism provided on each of the bars, the feed drive mechanism driving the feed carrier in the work transfer direction;

a base held by the feed carrier;

a lift drive mechanism provided on the feed carrier, the lift drive mechanism driving the base in a lift direction so that the base moves vertically; and

a work holder detachably attached to the base for holding a work.

15 [CLAIM 7]

The work carrying device of pressing machine according to claim 6, further comprising:

20 a clamp drive mechanism provided on the feed carrier, the clamp drive mechanism driving the base in a clamp direction perpendicular to the work transfer direction.

[CLAIM 8]

The work carrying device of pressing machine according to claim 6 or 7,

wherein at least one of the feed drive mechanism and the lift drive mechanism is provided with a linear motor.

25 [CLAIM 9]

The work carrying device of pressing machine according to claim 7,

wherein the clamp drive mechanism is provided with a linear motor.

[CLAIM 10]

The work carrying device of pressing machine according to claim 6 or 7,

wherein at least one of the feed drive mechanism and the lift drive mechanism is provided with a servomotor.

[CLAIM 11]

5 The work carrying device of pressing machine according to claim 7,
wherein the clamp drive mechanism is provided with a servomotor.

[CLAIM 12]

The work carrying device of pressing machine according to any one of claims 6 to 11,

10 wherein a plurality of the work holders for plural working processes are detachably attached to the base.

[CLAIM 13]

The work carrying device of pressing machine according to any one of claims 6 to 12, further comprising:

a bar-interval adjusting device for adjusting an interval between the pair of bars.

15 [CLAIM 14]

The work carrying device of pressing machine according to any one of claims 6 to 13,

wherein the pair of bars can be detached from the frames.

[CLAIM 15]

20 The work carrying device of pressing machine according to any one of claims 1 to 14,

wherein a plurality of the feed carriers are held by each of the bars, a motion of the each feed carrier being individually controllable.

[CLAIM 16]

25 The work carrying device of pressing machine according to any one of claims 1 to 14,

wherein a plurality of the feed carriers are held by each of the bars, adjacent ones of the plurality of the feed carriers being connected to each other by a connector.